

ABSTRACT

A method of determining noise in a CATV channel, wherein the CATV channel comprises a predetermined frequency band, that employs digital signal processing to isolate the noise signal from an in-service television signal. The method includes an initial step of obtaining a television signal corresponding to a predetermined CATV channel, the television channel comprising a carrier signal modulated by an information signal. Thereafter, the method includes the step of sampling at least a part of the television signal to produce a digital signal segment, said digital signal segment comprising a carrier component, a noise signals component, and an information signal component, wherein said information signal component has a substantially predetermined signal pattern. The method then employs digital signal processing to separate the carrier component from the digital signal segment to produce a baseband signal substantially comprising the information signal and the noise signal. Finally, an estimate of the information signal is obtained and then subtracted from the baseband signal, thereby producing a noise signal estimate.